

TEST ID: PGXFP

FOCUSED PHARMACOGENOMICS PANEL

USEFUL FOR

- ▶ Preemptive or reactive genotyping of patients for pharmacogenomic purposes
- ▶ Providing an assessment for genes with strong drug-gene associations

CLINICAL INFORMATION

This panel provides a comprehensive analysis for multiple genes with strong drug phenotype associations. Each sample is tested for specific variations with known functional impact.

Pharmacogenomic data for the following specific variants are reviewed and reported (if present):

- ▶ *CYP1A2* *1F, *1K, *6, and *7
- ▶ *CYP2C9* *2, *3, *4, *5, *6, *8, *9, *11, *12, *13, *14, *15, *16, *17, *18, *25, *26, *28, *30, *33, and *35
- ▶ *CYP2C19* *2, *3, *4, *5, *6, *7, *8, *9, *10, *17, and *35
- ▶ *CYP2D6* *2, *2A, *3, *4, *4N, *5, *6, *7, *8, *9, *10, *11, *12, *13, *14A, *14B, *15, *17, *29, *35, *36, *41, *68, and *CYP2D6* gene duplication. Additional *CYP2D6* variants may be detected through the reflex testing process.
- ▶ *CYP3A4* *8, *11, *12, *13, *16, *17, *18, *22, and *26
- ▶ *CYP3A5* *3, *5, *6, *7, *8, and *9
- ▶ *CYP4F2* *3
- ▶ rs12777823G>A
- ▶ *SLCO1B1* rs4149056 variant found in the *5, *15 and *17 alleles, and rs4149015 found in the *17 and *21 alleles
- ▶ *VKORC1* c. -1639G>A, c.85G>T, c.106G>T, c.121G>T, c.134T>C, c.172A>G, c.196G>A, c.358C>T, and c.383T>G

Based on the results of each assay, a genotype is assigned and a phenotype is predicted for each gene. Assessment of multiple genes may assist the ordering clinician with personalized drug recommendations, avoidance of adverse drug reactions, and optimization of drug treatment.

REFERENCE VALUES

An interpretative report will be provided.

ANALYTIC TIME

3 days (not reported Saturday or Sunday)

SPECIMEN REQUIRED

Detailed on the back side of this sheet.

SPECIMEN REQUIRED

Submit only 1 of the following specimens:

Type

Whole blood

Container/Tube

Lavender top (EDTA)

Specimen Volume

3 mL

Type

Saliva

Patient Preparation

Patient should not eat, drink smoke, or chew gum 30 minutes prior to collection.

Container/Tube

Saliva Swab Collection Kit (T786: fees apply)

Specimen Volume

One swab

Type

DNA

Container/Tube

2 mL screw top tube

Specimen Volume

100 mcL (microliters)

INTERPRETATION

An interpretive report will be provided that focuses on only drugs and genes with published pharmacogenomic practice guidance by the Clinical Pharmacogenetics Implementation Consortium, other professional organizations or where strong FDA guidance has been issued in drug labels.

For additional information regarding pharmacogenomic genes and their associated drugs, see [Pharmacogenomic Associations Tables](#) in Special Instructions. This resource also includes information regarding enzyme inhibitors and inducers, as well as potential alternate drug choices.